

## **EXHIBIT 15**

Affidavit of Stuart Hartley Hurlbert

AFFIDAVIT OF STUART HARTLEY HURLBERT

BEFORE ME, the undersigned authority, personally appeared, Stuart Hartley Hurlbert, who upon being first duly sworn, states as follows:

1. My name is Stuart Hartley Hurlbert and I reside at 13913 Recuerdo Drive, Del Mar, California, 92014. I make this affidavit as: an emeritus professor of ecology at San Diego State University (1970-2016); a fellow of the American Association for the Advancement of Science (1989 – 2016); the founding president of the International Society for Salt Lake Research (1994-1999); and a winner of scientific awards from the International Ecological Association, the American Statistical Association, and the U.S. National Academy of Sciences.

2. In the area of environmental activism, I have been a member of the Sierra Club, off and on, since the 1960s, and have written numerous general articles and essays on population-environment relations. I have been disappointed to see in recent decades the Sierra Club become more partisan and thereby diminish its influence by adopting political positions on issues negligibly related to environmental ones and even favoring anti-environmental positions on population issues.

3. Since I was an ecology graduate student at Cornell University in the mid-1960s, I have understood the negative impacts of human population growth on wildlife and the environment, read widely on the topic, and lectured on the topic in

courses I taught, especially in limnology (lake and river ecology) as well as human impacts on ecosystems. Starting in the late 1970s, I became more active on these issues, writing letters and op-eds, supporting several population stabilization groups, and, when serving as a consultant or advisor to government agencies, always attempting to ensure that population growth, however taboo the topic to my paymasters, got the attention it merited. Starting in 2000, I served on the board of directors of Californians for Population Stabilization (CAPS) until 2012. I am still a member.

4. In 2012, I started a new organization, Scientists and Environmentalists for Population Stabilization (SEPS), which focuses on educating university professors and students in the environmental sciences about national population, global population, and economic issues. SEPS operates exhibitor booths at major scientific meetings, distributing massive amounts of literature to attendees. The official mission of SEPS is “to improve understanding within the U.S. scientific, educational, and environmental communities of the fact of overpopulation and its social, economic, and environmental consequences at both national and global levels. We advocate for U.S. population stabilization followed by its gradual reduction to a sustainable level by humane, non-coercive means.” SEPS does not lobby legislators and our main objective is simply to get discussion of population issues, and especially U.S. population policies, back into university curricula and

back on the agenda of environmental organizations. The boards of SEPS include a number of outstanding U.S. conservation biologists and environmental scientists.

5. As a long-time resident of Southern California, I have directly been damaged by major negative environmental impacts to the region resulting from population growth. I lived in Riverside, California from 1966-1970, and in San Diego and Del Mar, California from 1970 to 2016. San Diego County is the fifth most populous county in the U.S., having grown from 2.5 million people in 1990 to almost 3.2 million in 2014. According to the Center for Immigration Studies, immigrants comprised 17.2 percent of the county's population in 1990 and comprise 23.4 percent in 2014.<sup>1</sup>

6. One of the biggest impacts in all of Southern California is traffic congestion. Despite construction of new freeways and the addition of new lanes to old freeways, tremendous amounts of time are lost sitting in stalled or slow moving traffic if one travels certain routes at certain times of day. In 1980, it took me 15 minutes to drive from my house in Del Mar to downtown San Diego at any time of day; now it often takes an hour if I start between 7:00 am and 9:00 am or after 2:30 pm. If I head north, it can take an additional hour to hour-and-a-half longer than it once did to get to the north side of the Los Angeles basin, e.g. to Santa Monica or

---

<sup>1</sup> Bryan Griffith & Steven Camarota, County Map: Growth of Adult Immigrant Population, 1990 to 2014, Center for Immigration Studies (Sept. 2016), <http://cis.org/Immigration-Maps/Growth-Immigrant-Population-Counties-1990-2014>.

Pasadena. This loss of time, restriction of travel schedules, and increased aggravation has had a negative impact on me.

7. Population growth in the San Diego region is responsible for increasing degradation of one of the treasures of our region, the Mission Trails Regional Park. With 7,220 acres, 60 miles of trails, five small mountains, and a pretty stream flowing through a gorge, it is one of the largest urban parks in the United States. Since 1970, I have used it for personal hiking and birdwatching as well as for field trips for my university classes. The tremendous post-1970 population growth, which is substantially due to immigration, of suburban San Diego and neighboring towns has, not unsurprisingly, resulted in large increases in visitors to this now suburb-surrounded park. With its steep topography and dominance of shrubby vegetation and thin soils, the toll on trails has been great. Heavy usage by hikers has destroyed soil structure allowing the occasional heavy rains to convert many trails into erosion gullies. Hikers then create new gully-avoiding trails to the side, causing additional destruction of vegetation and soil structure. All of this degradation happens faster than park staff and their volunteers can repair the trails, fill in the gullies, add fences and build diversion channels. Perhaps the park's fate will be more closed areas and trails, more paved trails, making it into more of an urban park and less a piece of nature. It has been personally saddening to see how this degradation of the park has accelerated over my years in San Diego.

8. Beach access in Del Mar has declined with population growth in northern San Diego County and the cost of beach parking has gone up. When I moved to Del Mar in 1980 and looked east from a hilltop, I could see little other to the east than canyons and mesa tops and chaparral country for about 25 miles. This was an area I hiked with my son when he was young, starting him on the road to becoming a naturalist and later a university professor of ecology. Much of this region is now filled in with new highways, new housing developments and new shopping centers. The new tens of thousands of people living there like to go to the beach just as much as do the 6,000 inhabitants of Del Mar. But expansion of beach parking has not been possible and so is now very difficult to find much of the time. My trips to the beach must be carefully scheduled just like my trips to Los Angeles. One way the political powers have reduced the crush is to increase the cost, with more and more of the formerly free parking areas being replaced by parking meters or paid parking lots. Population growth has increased the scarcity and hence price of another commodity, created difficulties for all, and reduced my quality of life.

9. One of the biggest ongoing, population-driven environmental disasters in Southern California is what is happening at the Salton Sea. This salty, ca. 380 square mile, below sea level lake 80 miles east of San Diego is the largest lake in California. Since its formation in 1905 as a result of a 'breakout' of the Colorado River, its level has been maintained mainly by agricultural wastewater inflows rich

in nutrients. Starting in the early 1950s with introduction of some marine fish species, it became a major sport fishery and popular site for boating and other aquatic recreational activities with the number of annual visitors exceeding, in some years in the 1970s, that for Yosemite National Park. The abundant fish and invertebrate populations have made it one of the most important habitats for water birds of diverse sorts in the Southwest. For over a century, the Salton Sea has represented a win-win-win symbiosis of agriculture, wildlife and human recreation. Population growth, development and the fist of political force majeure from coastal California are now destroying this symbiosis. This is the same population growth and development that long ago eliminated 90 percent of the wetlands in the rest of the state, making the Salton Sea now even more critical to wildlife. The Salton Sea's formation in 1905 was a kind of accidental mitigation project that has partially compensated for loss of wetlands along the California coast and in California's Central Valley over the last century and a half.

10. Population growth outside the Salton Sea basin is damaging the Salton Sea in many ways. It has led to greater demands for water that come at the Salton Sea's expense and threaten its survival. Because of the need for ever more water along the coast, deals among water agencies, cities, states and the federal government have been made that reduce water inflows to the Salton Sea. The "saved" water is then, directly or indirectly, available to serve the ever-growing

water demands of Southern California's unending population growth. Mechanisms already in operation include fallowing of agricultural land in the Imperial Valley, concrete lining of major irrigation canals, recycling of surface runoff from agricultural fields, and so on. Certain water agencies some decades ago filed petitions seeking water rights to the entirety of Salton Sea inflows. Their idea is that these brackish waters could be desalinated, cleaned up, sold and used to support future population growth with no regard to the environmental damage that would cause. Population growth thus threatens the Salton Sea's very survival. Furthermore, the political strength of water demands is highly sensitive to just how many people are clamoring for more water. A lower rate of immigration driven population growth would reduce demands on the waters that the Salton Sea needs. Growth-inducing and purely discretionary actions taken by the Department of Homeland Security (DHS) have led to additional massive numbers of individuals settling in California. Had those actions not been taken, the Salton Sea would be in less danger of being destroyed.

11. The survival of the Salton Sea means a great deal to me personally. Since the mid-1960s, I have done a lot of bird watching at the Salton Sea and surrounding areas, where many millions of birds and about 420 species can be found. Starting in the late 1970s, I started taking classes of San Diego State students out to the Salton Sea on ecology field trips. Starting in the late 1980s,



some of my graduate students started doing thesis projects related to the Salton Sea's ecology. In 1996, I founded the San Diego State University Center for Inland Waters and served for about ten years as its director. During that time, different San Diego State University research groups conducted research on the physical dynamics, chemistry, microorganisms, invertebrates, fish, and birds at the Salton Sea. The resulting scientific papers now represent the primary corpus of knowledge on the ecology of the Salton Sea. I am author or co-author of 31 of these scientific papers. We now know that if it were not for the plans already in effect to reduce inflows to the Salton Sea, it would remain a large lake and prime wildlife habitat for at least another century. It pains me greatly to be a witness to its population-driven demise.

12. In other more policy-oriented op-eds, papers and presentations, and as co-chairman of a large symposium on the Salton Sea in 2005 and editor of its proceedings, I personally attempted to give California population growth the strong attention it merited as California's population growth has been and is the main driver of the Salton Sea's current problems and bleak future prospects. The strong resistance of some scientists and bureaucrats in state and federal agencies to serious discussion or even mention of the taboo topic of immigration driven population growth has been documented in published papers. Sunlight is the best disinfectant for the censorship that can be found even at high levels in scientific,

academic, and agency subcultures. One of my op-eds, co-authored with Kevin Doyle, former director of conservation programs for the National Wildlife Federation, challenged the water barons.<sup>2</sup> The op-ed touched on many issues, but its core was about how those political forces that want the population of San Diego to grow at 2 percent per year manipulate political processes and ignore environmental considerations in order to grab more water for San Diego from the Salton Sea region.

13. After years of scientific research and analysis, coordinated mostly by the U.S. Geological Survey, and of policy considerations and stakeholder consultations coordinated by a joint powers authority, the Salton Sea Authority, a \$8.9 billion Salton Sea “restoration” plan was developed in 2007 and then approved, but not funded, by the California legislature. None of the government agencies, environmental organizations, or universities involved in these plans were permitted to question the wisdom of the investment even though the water needs of a still growing population might bring Salton Sea inflows to zero a few decades from now. The lone, wise voice in the wilderness was that of the California Legislative Analyst. She warned in her 2008 analysis of the restoration plan that the Salton Sea has no explicit water rights under state or federal law, and that the

---

<sup>2</sup> Kevin Doyle and Stuart Hurlbert, *Water Policy, Urban Developers, and Monkey Wrench Gangs*, San Diego Union Tribune, September 26, 2002, available at <http://www.sci.sdsu.edu/salton/WaterPolMonkeyWrenchGangs.html>.

state legislation authorizing a Salton Sea restoration project called only for “maximum feasible attainment” of certain environmental objectives. Additionally, she stated that “it is possible that continuing urban growth in Southern California will increase the economic and political pressure to transfer additional water from Imperial Valley [origin of the major inflows to the Salton Sea] to urban Southern California.” In other words, what may be “feasible” in the long run may be “not very much.” And since then, the federal government has repeatedly focused on trying to expand immigration even more—even though that would greatly accelerate “urban growth” in California and elsewhere. Public pressure has repeatedly stopped the U.S. Congress, in 2006, 2007, and 2013, from passing comprehensive immigration expansion legislation. But public pressure has been unsuccessful in stopping DHS from driving immigration to ever higher levels using its considerable discretionary power over implementation and enforcement of existing immigration laws.

14. At the Salton Sea over the last decade there has been a retreat to the designing of ingenious, small scale projects for creating shallow water impoundments in the vicinity of the mouths of the three rivers feeding the Sea. These may provide good habitat for fish and invertebrates, and birds that feed on them. But at best their areal extent would be less than ten percent of the area of the present Salton Sea. The plan is for most of the Salton Sea to dry up except for

these impoundments and some hypersaline, fish- and invertebrate-free brine pools that will remain in the deepest pockets of the basin. As the lake shrinks, tens of thousands of acres of lake bed will be converted into a dry, salty pampa. During windy days, this shrinkage will lead to large increases in particulate air pollution in a region where there already are severe health problems due to this.



Photo of Bombay Beach marina on east side of Salton Sea, March 2013. This is now completely dried up as a result of dropping lake level.



Photo of Stuart Hurlbert taking plankton sample in March 2013 in a brackish water impoundment now partially cut off from the Salton Sea at its southern end by falling water levels. This is one of the small portions of the Sea that authorities may be able keep as wetland habitat.

15. Another ecosystem where human population growth is a serious ongoing threat is the Columbia River and its basin in the Pacific Northwest. During 2005-2008, I was privileged to serve on the Columbia River Basin Independent Scientific Advisory Board. This Board was administered by the Northwest Power and Conservation Council. The Board's function was "to provide independent scientific advice and recommendations regarding scientific issues posed by the respective agencies on matters that relate to their fish and wildlife programs." I was particularly happy to join the Board because it was just adding to its agenda a

project to produce a ‘white paper’ on “Human Population Impacts on Columbia River Basin Fish and Wildlife,” just the sort of project that state and federal agencies have never allowed to be contemplated for the Salton Sea. Human impacts on fish and wildlife in the region have already been great and are scheduled to become even greater, in large part because the four principal states (Oregon, Washington, Montana, Idaho) in the basin have population growth rates 50 to 100 percent higher than does the U.S. as a whole. However, I was soon dismayed, indeed shocked, when I discovered the degree to which members of our “independent” board were willing to provide political cover to politicians. The Board treated U.S. population growth as an unstoppable juggernaut unamenable to better U.S. laws and policy, and decided to be silent about the degree to which certain regional and U.S. politicians were attempting to increase the U.S. population growth rate, all matters on which I provided extensive information for the report. My fellow board members, however, rejected, without discussion, all my substantive suggestions, so I requested my name be left off the title page of the report. Later, I documented this episode in a published article, “Pacific salmon, immigration, and censors: Unreliability of the cowed technocrat.” I greatly regret not having been a more effective advocate for salmon, the Columbia River and the people of that region.

16. As an ecologist who has worked on a variety of ecological and environmental issues since the 1960s, as a scientific researcher, as a consultant, as an advisor to state and federal agencies, as a member of environmental organizations, and as a director or founder of organizations focused on population-environment connections (CAPS, SEPS), I am highly familiar with the 1969 National Environmental Policy Act (NEPA). At the time, I was greatly pleased with its passage, and its clear references to “the profound influences of population growth” and “the critical importance of restoring and maintaining environmental quality[,]” and the need to “achieve a balance between population and resource use.” In 1972, the report of the *Rockefeller Commission on Population Growth and the American Future* came out. Rockefeller said in his letter of transmittal: “After two years of concentrated effort, we have concluded that, in the long run, no substantial benefits will result from further growth of the Nation’s population, rather that the gradual stabilization of our population through voluntary means would contribute significantly to the Nation’s ability to solve its problems. We have looked for, and have not found, any convincing economic argument for continued population growth. The health of our country does not depend on it, nor does the vitality of business nor the welfare of the average person.” At that moment, everything seemed in place for a national population policy to be developed and for the environmental impacts of government actions and policies

inducing further population growth to be given the serious consideration they deserved. But, unfortunately these concerns have not been given that consideration, and it has been personally discouraging to see how much of my own work as a scientist, consultant and environmentalist has gone for naught as a result.

17. I understand that in California, and in the U.S. as a whole, population growth is now driven primarily by immigration, the rate of which has increased roughly 500 percent since immigration policy was reworked in 1965. This has more than canceled out the environmental benefits we might have had from the end of the 'baby boom' when U.S. family size (or Total Fertility Rate) dropped from 3.8 in the early 1960s to 1.7 by the early 1970s. The U.S. population could have stabilized by now at less than 300 million but instead we're at 325 million with the government attempting to increase the rate of population growth by way of even higher immigration rates. For decades, the de facto population policy of the federal government has been, and remains, to encourage unending U.S. population growth from immigration. While this may suit the ideologies of various extreme anti-science and anti-environment entities on both the right and left, it flies in the face of NEPA and the whole rationale for it. NEPA is very clear that endless population growth does not serve the national interest.

18. Public pressure, in the form of constituents who would have to bear the costs, including devastating environmental ones, has repeatedly stopped Congress



on the brink of passing legislation that would supercharge this already high, immigration-fueled growth to even higher levels . Three comprehensive immigration expansion bills failed to pass, in 2006, in 2007, and again in 2013-2014. But unlike Congress, DHS administrators are not democratically elected and can mostly ignore the electorate. As an agency, it has a great deal of discretionary control over the levels of immigration through the way it chooses to implement immigration laws. Public participation laws, like NEPA, were supposed to provide for more accountability from the administrative branches of government. But, when it comes to immigration, DHS has ignored NEPA completely.

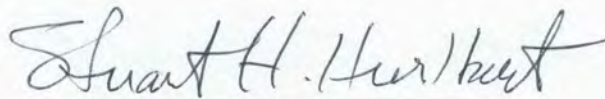
19. NEPA was designed to provide for environmentally informed decision making by federal agencies and public participation in those decisions. As few factors can have as large environmental impacts as continued population growth, any proposed project or government action or series of related actions that could result in a large increase in the U.S. population should be evaluated for how large of an increase to the population that action might result in, and the likely environmental consequences of that increase. Because immigration is now the major driver of population growth, and DHS is responsible for regulating immigration, DHS ought to conduct a NEPA analysis before engaging in discretionary actions that will have an impact on the size of the population, and, therefore, a significant impact on the environment. And we now have scientific

data allowing us to calculate roughly how much air and water pollution will be generated by every individual added to our population, how much additional housing and other infrastructure that will be needed, how much land will be converted or degraded to provide that infrastructure, how much additional food will be needed and so on. The numbers for need or damage are small – except when we’re talking about increases of 100,000 or a million at a time. DHS should calculate how many people its actions and decisions regarding how to implement immigration regulations are likely to add to the population, and then it can at least estimate the likely environmental impact of that added population.

19. We also need to recognize that over the medium and long term, it is not the number of immigrants admitted that has the biggest impact. Rather it is the number of descendants they likely will produce when the immigrants have children, grandchildren and great grandchildren, as is their right, at about the same rate as U.S. citizens. A September 2015 study by the Pew Research Center projects that given current U.S. trends in fertility and immigration, the U.S. population will increase by 116 million between 2015 and 2065 and that 88 percent of that increase will be due to post-2015 immigrants and their descendants. The largely environment-oblivious DHS has been unable to comprehend the draconian environmental consequences of putting the U.S. on the path to becoming another India or China, countries that delayed too long in attempting to slow their

population growth rates. If DHS and its predecessor agencies had been doing proper NEPA analyses all along, it might have changed its policies long ago, and I might have seen much less damage occur to the places I love. I fear that if DHS continues to use its discretion to increase U.S. population size without a thought to the environmental consequences, the situation will only get worse. If DHS were to start doing the kind of NEPA analysis the law requires, perhaps the fish and wildlife and other environmental amenities of the Salton Sea and Columbia River basin might still be saved for future generations to enjoy as I have.

FURTHER AFFIANT SAYETH NOT.

  
Stuart H. Hurlbert

Subscribed and sworn to before me on \_\_\_\_\_, by Stuart Hartley Hurlbert. He is personally known to me or has presented \_\_\_\_\_ as identification.

[See Attached For Official Notary](#)

\_\_\_\_\_  
NOTARY PUBLIC  
STATE OF CALIFORNIA  
MY COMMISSION EXPIRES



**CALIFORNIA JURAT**  
(CALIFORNIA GOVERNMENT CODE § 8202)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA )  
COUNTY OF San Diego )

Subscribed and sworn to (or affirmed) before me on this 30 day of September 2016  
by Stuart H Hurlbert \_\_\_\_\_, proved to me on the basis of  
(Name of Signer(s))  
satisfactory evidence to be the person ☒ who appeared before me.



Debra R Benson  
Signature of Notary Public

(Notary Seal)

\_\_\_\_\_  
ADDITIONAL OPTIONAL INFORMATION \_\_\_\_\_

Description of Attached Document

Title or Type of Document: Affidavit Document Date: \_\_\_\_\_

Number of Pages: 18 Signer(s) Other Than Named Above: \_\_\_\_\_

Additional Information: \_\_\_\_\_